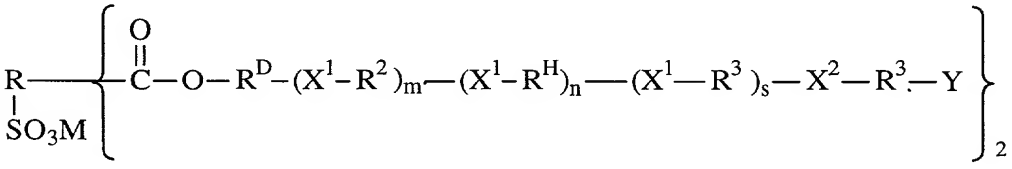
What is claimed is:

1. An ink jet printable ink comprising an aqueous vehicle, a colorant, and dispersed particles of a silyl-terminated sulfopoly(ester-urethane).

2. The ink of claim 1, wherein the silyl-terminated sulfopoly(ester-urethane) is described by the formula:



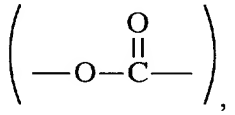
wherein

R represents a C_6 - C_{12} aryl triyl or C_1 - C_{20} aliphatic triyl group (trivalent aryl or aliphatic group) wherein M is H^+, an alkali metal cation, an alkaline earth metal cation, or a primary, secondary, tertiary, or quaternary ammonium cation;

each m independently represents 0 or 1, each n independently represents 0 or 1, each s independently represents s = 0 or 1, with the proviso that, at least one of m or n must be equal to 1;

each R^D independently represents:

1) at least one of a divalent linear or branched organic group of 20 to 150 carbon atoms in units of 2 to 12 methylene groups and arylene groups of 6 to 10 carbon atoms separated by at least one of 1 to 50 catenary oxygen atoms and by 1 to 30 oxycarbonyl groups,



2) an organic group selected from the group consisting of a linear or branched alkylene group having 2 to 12 carbon atoms, a cyclopentamethylene group, a cyclohexamethylene group, a 5- or 6-membered azacyclic group, a phenylene group, a naphthalene group, a phenylenemethylenephenylene group, the organic group optionally being substituted by up to four lower alkyl groups having 1 to 4 carbon atoms and a total

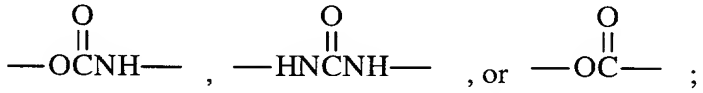
of up to 15 carbon atoms, which organic group can be chain extended by a transesterification reaction between a diol terminated ester precursor and a lower aliphatic diester of an aliphatic diacid having from 2 to 12 carbons or an aromatic diacid having from 8 to 12 carbons or reaction between a diol terminated ester precursor and an aliphatic lactone of 4 to 6 carbons, or

3) the structure $\{-R^1(X^1-R^2-X^1-R^1)_p-\}$ where p is an integer from 1 to 5,

produced by the reaction of a polyol with an isocyanate having the structure $OCN-R^2-NCO$ to produce a segment having a molecular weight of from 500 to 4,000;

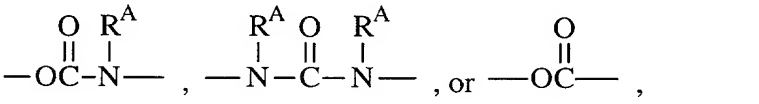
each R^1 independently represents a linear or branched alkylene group having 2 to 12 carbon atoms, or an arylene group having 6 to 10 carbon atoms;

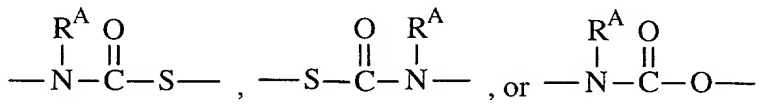
each X^1 independently represents



each R^2 independently represents an organic group selected from the group consisting of a linear or branched alkylene group having 2 to 12 carbon atoms, a cyclopentamethylene group, a cyclohexamethylene group, a 5- or 6-membered azacyclic group, a phenylene group, a naphthalene group, a phenylenemethylenephenylene group, the organic group optionally being substituted by up to four lower alkyl groups having 1 to 4 carbon atoms and a total of at most 15 carbon atoms;

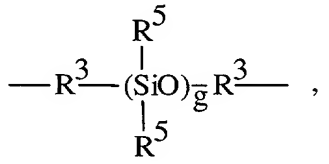
each X^2 independently represents



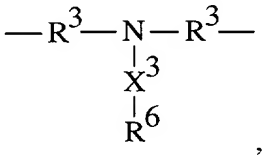


wherein each R^A independently represents hydrogen, lower alkyl having 1 to 4 carbon atoms, or R^1-Y, wherein R^1 and Y are as previously described;

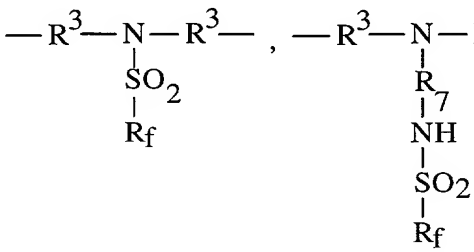
each R^H independently represents a divalent hydrophobic group selected from divalent oligomeric siloxanes having the structure



divalent organic groups having the structure



or divalent organic groups having one of the structures



or quaternary salts thereof, wherein

each R^3 independently represents a divalent linear or branched alkylene group having 2 to 12 carbon atoms, or a divalent arylene or alkarylene group having 6 to 20 carbon atoms;

each Y independently represents H, an alkyl group having from 1 to 20 carbon atoms, an aryl group having from 6 to 10 carbon atoms, or

$$-Si(OR^8)_z(R^4)_w,$$

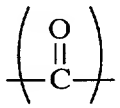
wherein each R^4 independently represents a monovalent lower alkyl group having from 1 to 4 carbon atoms, each R^8 is H or a monovalent lower alkyl group having from 1 to 4 carbon atoms, each z is independently 2 or 3, each w is independently 0 or 1, and wherein z + w = 3, with the proviso that at least one Y has the formula

$$-Si(OR^8)_z(R^4)_w;$$

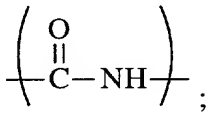
each R^5 independently represents a monovalent group selected from the group consisting of alkyl groups of 1 to 12 carbon atoms, aryl having 6 to 10 carbon atoms, or aralkyl groups having 6 to 10 carbon atoms, with at least 70 percent of R^4 being methyl;

each g independently represents an integer of from 10 to 300;

each X^3 independently represents a covalent bond, a carbonyl group,



or a divalent amido group



;

each R^6 independently represents a monovalent group selected from the group consisting of alkyl groups of about 4 to about 60 carbon atoms;

each R^7 independently represents a divalent group selected from the group consisting of alkylene groups of 2 to about 12 carbon atoms; and

each R_f independently represents a monovalent saturated fluoroaliphatic group having 6 to 12 carbon atoms, at least four of which are fully-fluorinated carbon atoms.

3. The ink of claim 1, wherein the ink is substantially free of organic solvents.

4. The ink of claim 1, wherein the colorant is a pigment.

5. The ink of claim 1, wherein the colorant is a dye.

6. The ink of claim 1, further comprising an additional dispersed polymer.

7. The ink of claim 6, wherein the additional dispersed polymer is present in an amount of from about 0.1 to about 3 times the weight of the silyl-terminated sulfopoly(ester-urethane) polymer.

8. The ink of claim 7, wherein the additional dispersed polymer is an acrylic polymer.

9. The ink of claim 1, further comprising a humectant.

10. The ink of claim 1, wherein the solids content is at least 20 weight percent of the total ink composition, and wherein the ink is ink jet printable.

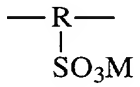
11. The ink of claim 1, wherein the solids content is at least 30 weight percent of the total ink composition, and wherein the ink is ink jet printable.

12. The ink of claim 1, wherein the solids content is at least 50 weight percent of the total ink composition, and wherein the ink is ink jet printable.

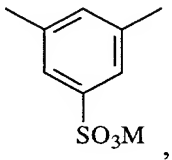
13. The ink of claim 1, wherein the ink has a viscosity of less than about 20 mPa·s at 20 °C and at a shear rate of 1000 s^{-1}.

14. The ink of claim 1, wherein the ink has a viscosity of less than about 5 mPa·s at 20 °C and at a shear rate of 1000 s^{-1}.

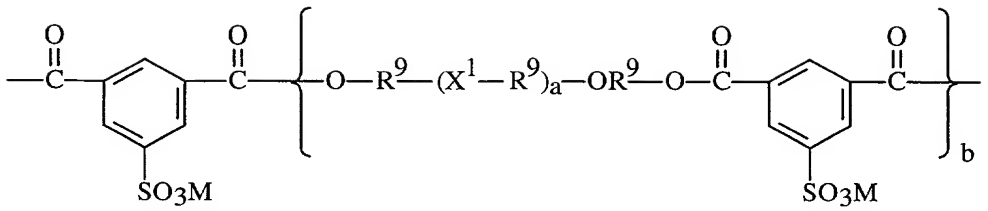
15. The ink of claim 2, wherein



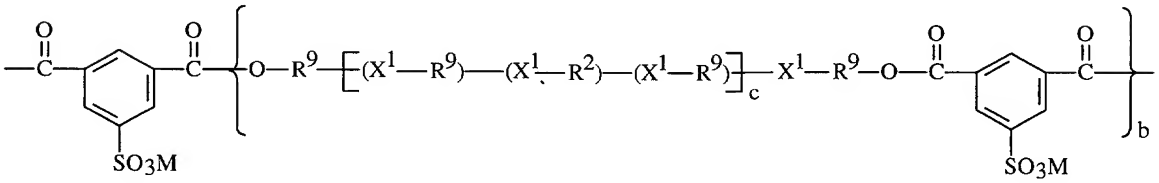
is:



,



, or



and wherein each R^9 independently represents a linear or branched alkylene group having 2 to 12 carbon atoms, an arylene group having 6 to 10 carbon atoms, or may also comprise an oligomeric segment.

16. The ink jet ink of claim 15, wherein the ink is contained within an ink jet printer cartridge.

17. A blendable ink set comprising at least three blendable inks of claim 1.

18. The ink set of claim 17, wherein the blendable inks consist of yellow, magenta, and cyan inks.

19. The ink set of claim 17, further comprising a fourth blendable ink.

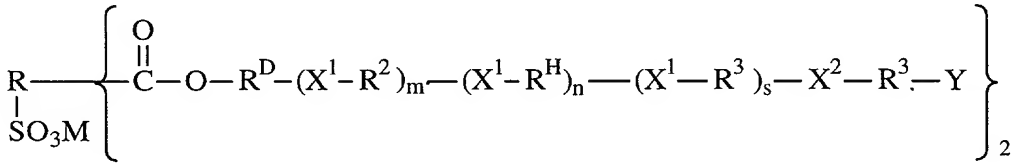
20. The ink set of claim 19, wherein the fourth blendable ink is a black ink.

21. The ink set of claim 19, further comprising a fifth blendable ink.

22. The ink set of claim 21, wherein the fifth blendable ink is a white ink.

23. The ink of claim 1, wherein the ink is contained within an ink jet printer cartridge.

24. A method of imaging a substrate comprising ink jet printing an aqueous composition onto a substrate wherein the aqueous composition comprises an aqueous vehicle and a silyl-terminated sulfopoly(ester-urethane) having the formula:



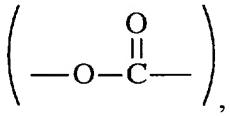
wherein

R represents a C_6 - C_{12} aryl triyl or C_1 - C_{20} aliphatic triyl group (trivalent aryl or aliphatic group) wherein M is H^+, an alkali metal cation, an alkaline earth metal cation, or a primary, secondary, tertiary, or quaternary ammonium cation;

each m independently represents 0 or 1, each n independently represents 0 or 1, each s independently represents s = 0 or 1, with the proviso that, at least one of m or n must be equal to 1;

each R^D independently represents:

1) at least one of a divalent linear or branched organic group of 20 to 150 carbon atoms in units of 2 to 12 methylene groups and arylene groups of 6 to 10 carbon atoms separated by at least one of 1 to 50 catenary oxygen atoms and by 1 to 30 oxycarbonyl groups,



2) an organic group selected from the group consisting of a linear or branched alkylene group having 2 to 12 carbon atoms, a cyclopentamethylene group, a cyclohexamethylene group, a 5- or 6-membered azacyclic group, a phenylene group, a naphthalene group, a phenylenemethylenephenylene group, the organic group optionally being substituted by up to four lower alkyl groups having 1 to 4 carbon atoms and a total of up to 15 carbon atoms, which organic group can be chain extended by a transesterification reaction between a diol terminated ester precursor and a lower aliphatic diester of an aliphatic diacid having from 2 to 12 carbons or an aromatic diacid having

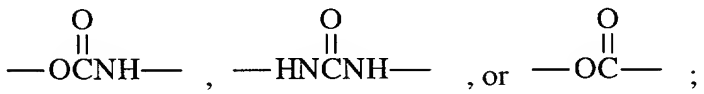
from 8 to 12 carbons or reaction between a diol terminated ester precursor and an aliphatic lactone of 4 to 6 carbons, or

3) the structure $\{-R^1(X^1-R^2-X^1-R^1)_p-\}$ where p is an integer from 1 to 5,

produced by the reaction of a polyol with an isocyanate having the structure OCN-R^2-NCO to produce a segment having a molecular weight of from 500 to 4,000;

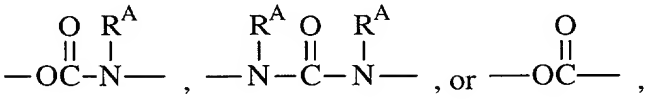
each R^1 independently represents a linear or branched alkylene group having 2 to 12 carbon atoms, or an arylene group having 6 to 10 carbon atoms;

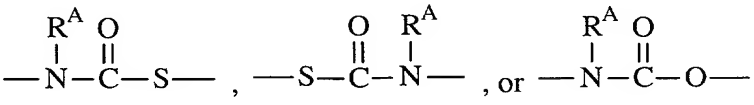
each X^1 independently represents



each R^2 independently represents an organic group selected from the group consisting of a linear or branched alkylene group having 2 to 12 carbon atoms, a cyclopentamethylene group, a cyclohexamethylene group, a 5- or 6-membered azacyclic group, a phenylene group, a naphthalene group, a phenylenemethylenephenylene group, the organic group optionally being substituted by up to four lower alkyl groups having 1 to 4 carbon atoms and a total of at most 15 carbon atoms;

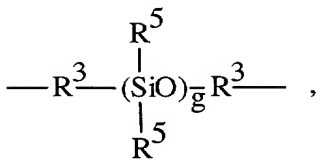
each X^2 independently represents



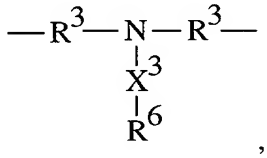


wherein each R^A independently represents hydrogen, lower alkyl having 1 to 4 carbon atoms, or R^1-Y, wherein R^1 and Y are as previously described;

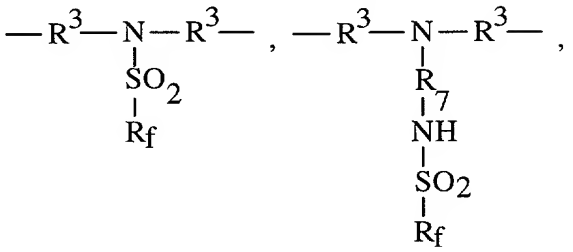
each R^H independently represents a divalent hydrophobic group selected from divalent oligomeric siloxanes having the structure



divalent organic groups having the structure



or divalent organic groups having one of the structures



or quaternary salts thereof, wherein

each R^3 independently represents a divalent linear or branched alkylene group having 2 to 12 carbon atoms, or a divalent arylene or alkarylene group having 6 to 20 carbon atoms;

each Y independently represents H, an alkyl group having from 1 to 20 carbon atoms, an aryl group having from 6 to 10 carbon atoms, or

$$-Si(OR^8)_z(R^4)_w,$$

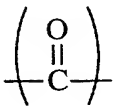
wherein each R^4 independently represents a monovalent lower alkyl group having from 1 to 4 carbon atoms, each R^8 is H or a monovalent lower alkyl group having from 1 to 4 carbon atoms, each z is independently 2 or 3, each w is independently 0 or 1, and wherein z + w = 3, with the proviso that at least one Y has the formula

$$-Si(OR^8)_z(R^4)_w;$$

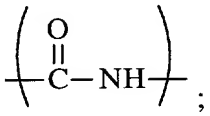
each R^5 independently represents a monovalent group selected from the group consisting of alkyl groups of 1 to 12 carbon atoms, aryl having 6 to 10 carbon atoms, or aralkyl groups having 6 to 10 carbon atoms, with at least 70 percent of R^4 being methyl;

each g independently represents an integer of from 10 to 300;

each X^3 independently represents a covalent bond, a carbonyl group,



or a divalent amido group



each R^6 independently represents a monovalent group selected from the group consisting of alkyl groups of about 4 to about 60 carbon atoms;

each R^7 independently represents a divalent group selected from the group consisting of alkylene groups of 2 to about 12 carbon atoms; and

each R_f independently represents a monovalent saturated fluoroaliphatic group having 6 to 12 carbon atoms, at least four of which are fully-fluorinated carbon atoms.

25. The method of claim 24, wherein the composition further comprises a colorant.

26. The method of claim 24, wherein the composition further comprises an additional dispersed polymer.

27. The method of claim 24, wherein the composition further comprises a humectant.

28. The method of claim 24, wherein ink jet printing comprises piezo ink jet printing.

29. The method of claim 24, wherein the substrate is a fabric.

30. The method of claim 29, wherein the fabric is a textile.

31. The method of claim 24, wherein the substrate is glass.

32. The method of claim 24, wherein the substrate is a polymer film.

33. The method of claim 32, wherein the polymer film is a laminate.

34. The method of claim 24, wherein the substrate is paper.

35. An article comprising a substrate imaged according to the method of claim 24.

36. An ink jet printable ink comprising an aqueous vehicle, colorant, and at least 20 weight percent dispersed shear deformable polymer particles wherein the polymer is self-crosslinking.

37. The ink of claim 36, wherein the polymer particles comprise silyl-terminated polymers.

38. The ink of claim 36, wherein the polymer particles comprise greater than 25 weight percent of the composition.

39. The ink of claim 36, wherein the polymer particles comprise greater than 30 weight percent of the composition.

40. The ink of claim 36, further comprising a dispersed polymer that is not shear deformable.

41. The ink of claim 36, wherein the composition further comprises a humectant.

42. A method of imaging a substrate comprising ink jet printing an aqueous composition on a substrate wherein the aqueous composition comprising an aqueous

vehicle, and at least 20 weight percent dispersed shear deformable particles, wherein the polymer is self-crosslinking.

43. The method of claim 42, wherein the deformable particles are not substantially swelled by the aqueous vehicle.

44. The method of claim 43, wherein the polymer particles comprise silyl-terminated polymers.

45. The method of claim 43, wherein aqueous composition further comprises a colorant.

46. The method of claim 45, wherein the colorant comprises pigment.

47. The method of claim 43, wherein the aqueous composition is water.

48. The method of claim 47, wherein the aqueous composition further comprises pigment.